

High Beta (or Gamma) which ranges from 32 Hz to over 100 Hz:

This is a newer area of research. Some states are related to anxiety and stress, while some are related to higher states of functioning.

Beta which ranges from 14 to 28 Hz:

This is the brainwave state of normal waking consciousness -- logical thought, analysis, concentration, alertness, problem solving, and action.

You are in beta most of your waking hours when you are thinking, speaking, and doing, and when you are reading this book. In beta, you discern, compare, judge, and criticize.

Alpha which ranges from 8 to 14 Hz:

This is the brainwave state of relaxation -- pleasant feeling states, automatic and routine activities (non-thinking activities), freedom from pain, physical healing.

You are in alpha when you are feeling soothed and calm, relaxing, letting your mind wander, daydreaming, bathing/showering, meditating, praying, letting go, dissolving into the environment, drifting off to sleep, being in a twilight state.

In alpha, you have rapid assimilation of facts with heightened memory and healing. You may experience an altered sense of time, free association (non-logical), and extrasensory perception.

Alpha is the doorway to the nonconscious. It is conducive to creative imagery and personal psychotherapeutic insights -- the "awakened mind."

Theta which ranges between 4 and 8 Hz:

This is the brainwave state of deep meditation, sleep and sleep-like states, dreaming sleep.

You are in theta when you are in deep reverie. When awake, it brings quietness of body, emotions and mind and builds a bridge between the conscious and nonconscious. This waking state is associated with creative people and hypnotic susceptibility.

Delta which is below 4 Hz:

This is the brainwave state of deep dreamless sleep -- a deep trancelike non-physical state

At birth, the primary waking brainwave state is theta, and that brainwave state is synchronized between the hemispheres. During the early childhood years, this waking brainwave state slowly speeds up until the primary waking brainwave state is beta. In the elderly, the brainwave state again slows to the alpha and theta rhythm. Though waking brainwave states change in direct correlation with aging, sleep brainwave rhythms remain the same from gestation to death.

As the brainwaves slow, there is an increase in the balance between the two hemispheres of the brain. This is called synchrony, brain synchronization, and whole brain integration. Slowing of brainwaves pushes the brain to reorganize itself at higher and more complex levels of functioning, a process predicted by Ilya Prigogine. His Nobel Prize winning work discusses open systems (dissipative structures) and their quantum leap way of reorganizing into a higher system.

